



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

October 11, 2013

Via E-mail

Mr. William G. Kachioff
Chief Financial Officer
Biocept, Inc.
5810 Nancy Ridge Drive
San Diego, CA 92121

**Re: Biocept, Inc.
Registration Statement on Form S-1
Filed September 23, 2013
File No. 333-191323**

Dear Mr. Kachioff:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Summary, page 1

1. We note your revised disclosure and response to comments 5 and 6 in our letter dated September 13, 2013, and we reissue the comments in part. Please revise:
 - The first paragraph under Our Company to disclose that your OncoCEE-BRTM breast cancer CTC test is the only test you sell, as the construction “develops and commercializes” does not clarify the extent to which your tests currently generate revenues;
 - To avoid the present tense when you discuss planned tests. As a non-exclusive example, you refer to CEE-Selector mutation tests on page 5 and state that “[t]hese tests can be performed”; and

- Where you discuss your advantages on pages 4-6, to separately address future tests and future advantages you hope to realize instead of discussing together what your “current and planned” tests can do.

Please revise accordingly.

2. Please revise here, page 25 and page 86 to quantify approximately what percentage of revenues, if any, you currently derive through Medicare.
3. We note your response to comment 7 in our letter dated September 13, 2013, and we reissue the comment. Please revise the introductory paragraphs and where appropriate to clarify the extent to which your historical revenues have been generated other than by your breast cancer test. In this regard, we note your statement on page 6 that “[a]lthough historically the bulk of our commercial revenues have come from performing our breast cancer test, we also offer clinical trial testing services,” which appears to suggest that some portion of historical revenues was generated through clinical trial testing services. Please revise to clarify that the percentage of historical revenues generated through clinical trial testing services was immaterial, if true, or specify the percentage of historical revenues generated through clinical trial testing services.
4. We note your response to comment 13 in our letter dated September 13, 2013. To place the risk in context, please revise the last risk factor on page 30 to address your reliance on the Aegea agreement, as it appears that you are materially dependent on intellectual property partially owned by Aegea. Please also clarify the extent to which your two issued U.S. patents and 33 pending U.S. and foreign patent applications are owned solely by you or through third party agreements with Aegea or others.
5. We reissue comment 14 in our letter dated September 13, 2013. Please provide qualitative and quantitative disclosure of your dependence on Clariant. You indicate in your response that you depend on the success of the anticipated expansion of sales due to the efforts of the direct sales force you would hire with the proceeds of the offering. It appears your risk factors should address your historical and continued dependence on Clariant given the possibility that your offering, anticipated new products or anticipated revenues from a planned sales force do not allow you to replace the anticipated decline in revenues.

Because of certain Medicare billing policies, we may not receive complete reimbursement
page 25

6. We note your response to comment 15 in our letter dated September 13, 2013. Please explain the significance of submitting a new dossier to Palmetto GBA regarding the CTC capture/enumeration component of your current and planned tests. We note your disclosure on page 88 that the analysis components, for which there are positive coverage determinations, have significantly greater billing value than the capture/enumeration components, which are subject to a negative coverage determination. Please discuss in

greater detail the “significantly greater billing value” of the analysis components and disclose whether reimbursement for the capture/enumeration components is necessary to produce sufficient revenues to become profitable.

7. Please revise the risk factor on page 30 to identify the “certain third parties” and “certain collaborators.”

Capitalization, page 43

8. Please tell us why exclusion of additional paid-in capital in your capitalization calculation for the period ended June 30, 2013 is appropriate, or revise accordingly in your next amendment.

Description of the Business, page 61

9. We partially reissue comment 25 in our letter dated September 13, 2013. Please discuss the degree to which the amount you receive depends on the payor or other factors, including the factors addressed in the “Coverage and Reimbursement for our Current Breast Cancer Test and our Planned Future Tests” section on page 88. In this regard, we note your disclosure on page 25 that you “expect that as much as approximately 50% of the patients for whom [you] perform cancer diagnostic tests will have Medicare coverage” and that “private payors sometimes look to Medicare determinations when making their own payment determinations.”
10. We note your statement on page 63 that the “future average price could well differ from our historical figure, based on increased demand generated by our future sales and marketing efforts and increasing recognition of the medical value of our products, possible improvement of the product, introduction of additional tests, and similar commercial factors.” Please revise to provide balanced disclosure in this regard by discussing factors that may cause the future average price to be less than the historical average price per test.

Our Competitive Advantages, page 71

11. We note your revised disclosure and response to comment 27 in our letter dated September 13, 2013. Please revise to discuss advantages of your current test separately from any advantages you anticipate from future tests, instead of combining them with the phrase “current and planned.”

Our Proprietary Tests and Services, page 72

12. We note your revised disclosure and response to comment 26 in our letter dated September 13, 2013. Please revise the narrative disclosure surrounding the table to

clarify the principal milestones, assumptions and work that must be completed for the tests projected for 2014 and 2015.

Third-Party Payor Reimbursement, page 86

13. We partially reissue comment 30 in our letter dated September 13, 2013. We note statements in this section regarding Medicare reimbursement. However, it is unclear if these statements are made generically about the industry or are meant to indicate that Medicare beneficiaries, you or other parties are reimbursed specifically for your tests. Please revise to clarify the extent of your Medicare coverage. For example, please clarify whether you have been reimbursed for tests performed on patients with Medicare coverage or if this is a future expectation.
14. We also note the statement on page 25 that you “have received positive Medicare coverage determinations and/or have the benefit of specific CPT codes.” Please revise to separately address coverage and CPT code reimbursement instead of using the construction “and/or.”

Properties, page 93

15. We partially reissue comment 33 in our letter dated September 13, 2013. Please revise your disclosure to discuss any amounts owed for rent in arrears. In that regard, we note your disclosure in Note 15 to the financial statements that “[a]s of December 31, 2012 and June 30, 2013, the Company owed rent in arrears of approximately \$185,000 and \$229,000, respectively.”

Equity Compensation Plan Information, page 107

16. We note the tabular disclosure included in this section in response to comment 38 in our letter dated September 13, 2013. Please revise the tabular disclosure to include the restricted stock units referenced in footnote two or advise us why you believe such information is not required to be included in the table.

Description of Capital Stock, page 123

17. We note that the amended certificate of incorporation to be in effect upon closing of this offering, filed as Exhibit 3.1.3 to this registration statement, includes an exclusive forum provision. Please revise this section to disclose the existence of an exclusive forum provision in the certificate of incorporation to be in effect upon closing of this offering. In addition, please discuss the effect of such provision on investors. Given the lawsuits challenging the validity of choice of forum provisions in certificates of incorporation, please also disclose that it is possible that a court could rule that your provision is inapplicable or unenforceable. Also include separate risk factor disclosure discussing the

risks attendant to the exclusive forum provision included in the amended certificate of incorporation to be in effect upon closing of this offering.

18. Please disclose whether investors who purchase shares in the initial public offering are subject to the exclusive forum provision. It appears that your amended certificate of incorporation will not be filed with the State of Delaware, and therefore will not become effective, until the closing date.

Report of Independent Registered Public Accounting Firm, page F-2

19. We note your response to comment 45 in our letter dated September 13, 2013 that you will give retrospective effect to the reverse stock split in the historical financial statements. Please obtain a preamble report from your auditor comprised of the standard report preceded by a preamble indicating that the split has not occurred, but when it does, the auditor expects to be in a position to furnish the report presented.

Notes to Financial Statements, page F-12

Note 3. Summary of Significant Accounting Policies, page F-12
Unaudited Pro Forma Information, page F-13

20. You stated in the response to comment 45 in our letter dated September 13, 2013 that the reverse stock split will occur before the completion of the offering, i.e., after effectiveness, and that it will be reflected retroactively in the historical financial statements. We are unable to agree with this approach. Accordingly, please revise to present the reverse stock split as a pro forma transaction throughout the document. Stock splits that will occur after the effective date must be presented as pro forma transactions. Please note that you can only give retroactive effect in the historical financial statements to stock splits that will occur at or immediately prior to the effective date of the registration statement. If the stock split will occur at or immediately prior to the effective date, please advise your auditor to revise its report to provide a draft audit report that is accompanied by a signed preface of the auditor indicating that it expects to be in a position to issue the report in the form presented at effectiveness. No registration statement can be declared effective until the preface is removed and the accountant's report finalized.

Note 5. Notes Payable, page F-19

21. We note your response to comment 47 in our letter dated September 13, 2013 that the number of shares into which the debt was converted was determined and fixed on June 28, 2013. Upon review of the debt conversion agreement filed as Exhibit 10.18.6.2, we are able to identify 35,923,845 of the 42,245,834 Series A preferred shares provided in your note conversion. Please identify the exhibit, or provide as an additional exhibit, the agreement for the note conversion of the remaining 6,321,989 Series A preferred shares.

Item 17. Undertakings, page II-7

22. We note your response to comment 49 in our letter dated September 13, 2013. Please provide the 512(a)(5)(ii) undertaking. For reference, see Securities Act Rules Compliance and Disclosure Interpretations, Question 229.01, which is available on our website.

Exhibits

23. Please file exhibits in their entirety, including all exhibits and attachments thereto. For example only, we note that Exhibit 10.1.1 appears to be missing Attachment II, Exhibit 10.1.2 appears to be missing an attachment referenced therein, Exhibit 10.2.1 appears to be missing all the attachments referenced therein, and Exhibit 10.11 appears to be missing all the exhibits referenced therein.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow

Mr. William G. Kachioff
Biocept, Inc.
October 11, 2013
Page 7

adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Myra Moosariparambil at (202) 551-3796 or Tia Jenkins at (202) 551-3871 if you have questions regarding comments on the financial statements and related matters. Please contact Tiffany Piland at (202) 551-3589 or James Lopez at (202) 551-3536 with any other questions.

Sincerely,

/s/ James Lopez (for)

John Reynolds
Assistant Director

cc: Michael Brown, Esq.